

Prevalence and Predictors of Physical Partner Abuse Among Mexican American Women

ABSTRACT

Objectives. This study determined the lifetime prevalence of physical abuse by a current partner among women of Mexican origin and assessed factors associated with abuse.

Methods. Data are for a subsample of 1155 women with current partners from a larger population-based cross-sectional survey of US residents of Mexican origin.

Results. The self-reported prevalence of physical abuse by a current partner was 10.7%. In multivariate analysis, factors associated with physical abuse included US birthplace (odds ratio=2.1; 95% confidence interval=1.24, 3.56), young age, urban residence, and having 4 or more children. Social support and regular church attendance were protective.

Conclusions. The self-reported prevalence of physical abuse among Mexican American women is high. US birth is associated with increased risk of abuse. Community-based prevention efforts should be aimed at this population. (*Am J Public Health*. 2001;91:441-445)

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Intimate partner violence (IPV) is recognized as a prevalent problem¹⁻⁴ with serious medical and social consequences.^{2,5-14} While research on IPV among Hispanics has been published,^{1,2,15-17} little is known about the prevalence of IPV and associated factors among ethnic subgroups such as Mexican Americans.

Among Hispanics, reports of IPV during the past year range from 10.5% to 17.3%,¹⁶⁻¹⁸ compared with rates among Whites of 3.4% to 11.6%.¹⁻⁴ However, debate exists about whether Hispanic families are more violent than Anglo families. Acculturation status may account for differing prevalence rates.

In the National Family Violence Survey (NFVS), past-year IPV was higher among Hispanics than among Whites (17.3% vs 10.8%).¹⁷ However, the interview was available only in English, and the survey results may disproportionately describe highly acculturated Hispanics. Other studies report lower rates of physical or sexual violence among Hispanics than among Whites.^{2,19,20} These studies provided Spanish interviews and thus may have included a wider range of acculturation levels. Finally, no differences were found between Hispanics and Whites in 2 population-based studies representing a national sample (n=800)¹⁶ and an urban sample (n=379).¹⁸

Increased acculturation to the United States by Hispanics (for which birthplace is often used as a proxy) has been associated with numerous health and mental health problems^{5,21-25} as well as the perpetration of IPV.^{16,26} Among Mexicans, acculturation has been described as disruptive to families, resulting in the deterioration of Mexicans' traditionally strong extended family orientation and social support networks.^{27,28} On the other hand, new immigrants also face stresses as they adapt to a new language and culture while often lacking key instrumental skills.²⁹ It could be argued that both immigrants and US-born Mexican Americans face family hardships that could result in increased violence.

Disparate findings on the prevalence of abuse among women of Mexican origin may be due to differences in study design and lack of measurement of acculturation. This analysis is unique in that it involves the first large study of IPV to employ a sample of exclusively Mexican American women. In addition, the survey represented urban, town, and rural areas and employed both English and Spanish interviews. Findings from this analysis ad-

dress 2 main questions. First, what is the prevalence of IPV by a current partner in a population-based sample of urban, town, and rural Mexican American women? Second, what is the role of birthplace in a woman's risk of physical abuse by her male partner? Since IPV among US-born women may be explained by the higher frequency of characteristics that are common risk factors for abuse, such as young age, greater number of children, poverty, urban residence, social isolation, and lack of church attendance, these characteristics were controlled for in logistic regression analyses.

Methods

Sample

The analysis includes data for women who were involved in an intimate relationship with a male partner at the time of the interview and who answered questions about violence (n=1155). These women are a subsample from a larger stratified randomized household survey of 3012 men and women of Mexican origin. All respondents were aged 18 to 59 years and lived in Fresno County, Calif, a primarily agricultural county whose population is 38% Hispanic. Overall response rates were 90%. Subjects were selected in a 3-stage stratified cluster sampling design with census blocks as primary sampling units and households as secondary sampling units. The original sample was stratified by sex and place of residence (urban, town, and rural). (For more information about the sampling procedure, see Vega et al.²⁴) To collect data for this study, we used a Computer Assisted Personal Interview (CAPI) system administered by a trained interviewer in the participant's home. Interviews were administered in English or Spanish and took approximately 1 hour. Weights were applied at the analysis stage to ensure comparability of the final sample to the actual distribution of county

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residents by urban, town, and rural residence, census block, and household size.

Measures

The outcome variable is physical abuse by a current male partner, measured by asking, "Has your current (spouse/partner) ever pushed you, hit you with a fist, used a knife or gun, tried to choke or burn you?" The question was adapted from the Abuse Assessment Screen.¹⁹

The primary predictor variable is birthplace (United States vs Mexico). Control variables include age (18–30 years vs 31–59 years), place of residence (urban, town, rural), family income (0–\$999 per month vs \$1000 or more per month), church attendance (≥ 1 time per month vs < 1 time per month), number of children (0–3 vs ≥ 4), and social support. Social support was measured by asking, "Do you have anyone with whom you can share your innermost thoughts and feelings or problems?" Other variables examined include partner's unemployment (yes/

no), a woman's heavy alcohol use (drinking 5 or more drinks per day at least once a week during any period of her life), and income ratio (a woman's earning more than or as much as her male partner vs less than her partner).

Analysis

All bivariate and logistic regression procedures were first calculated with the statistical software SPSS, version 7.5 (SPSS, Inc, Chicago, Ill). SUDAAN³⁰ was used for all analyses to adjust standard errors to reflect stratified and cluster sampling strategies. Prevalence estimates and 95% confidence intervals for physical abuse (ever by current partner) were calculated. Univariate and bivariate frequencies were used to describe characteristics of those with and without a history of physical abuse by a current partner. Group differences and crude odds ratios were calculated with a χ^2 test or the Fisher exact test, with significance levels set at .05. Logistic regression

models were constructed to describe differences between women reporting or not reporting IPV, with factors thought to be associated with abuse controlled for. The final model was built by introducing 1 predictor at a time and making log likelihood comparisons to retain variables when the new model was different from the previous model at the $\leq .05$ level.

Results

Sample Characteristics

The distribution of the sample by demographic characteristics and by abuse status is shown in Table 1. A total of 127 women (10.7%; 95% confidence interval [CI]=8.03%, 13.40%) reported physical abuse by a current partner. Approximately two fifths of the women were born in the United States. The median age was 32 years, with a range of 18 to 59 years. Once the data were weighted, over 60% of the sample lived in an urban area, 15% lived in small towns, and 25% lived in rural areas of Fresno County. Income was low, with 45% having family incomes of less than \$1000 per month. Women had a median of 2 children. Church attendance was common, with 62% attending church 1 or more times a month. Social support was reported by 78% of women.

Table 2 presents crude and adjusted odds ratios for IPV. In bivariate analyses, the odds of reporting IPV were 2.45 times higher (95% CI=1.38, 4.35) among US-born women than among Mexican-born women. For women living in an urban environment, the odds of reporting IPV were more than 2.5 times higher than for women living in rural areas. Living in a town was not associated with significantly elevated risk for IPV compared with rural residence. No church attendance or infrequent church attendance significantly increased the odds of IPV.

The independent effects of birthplace, age, residence, income, social support, number of children, and church attendance on IPV were examined with logistic regression models controlling for all other variables. US birthplace remained associated with IPV (odds ratio [OR]=2.10; 95% CI=1.24, 3.56) even after the other variables in the model were adjusted for. Young age, living in an urban area, lack of social support, having 4 or more children, and no or infrequent church attendance all were associated with IPV in a logistic regression model.

To examine possible explanations for the association between birthplace and IPV, a number of characteristics were individually introduced into the model. None of the following characteristics explained the IPV–birthplace association: male partner's unemployment, vic-

TABLE 1—Demographic Characteristics (Weighted) of Mexican American Women With Current Partners, by Physical Abuse Status: Fresno County, Calif, 1996

	% of Sample (n = 1188) ^a	% Physically Abused
All respondents	100.00	10.7
Birthplace		
US	41.7	15.8
Mexico ^b	58.3	7.1
Age, y (median = 32)		
18–30	44.1	12.6
31–59	55.9	9.3
Residence		
Urban	60.5	13.2
Town	14.7	8.6
Rural	24.9	5.8
Income ^c		
\$0–\$999/month	44.6	10.5
\geq \$1000/month	55.4	10.7
Social support		
No	21.7	14.2
Yes	78.3	9.7
No. of children (median = 2)		
≥ 4	39.5	13.4
0–3	60.5	9.0
Church attendance		
< 1 time/month	37.9	16.2
1 or more times/month	62.1	7.4
Partner unemployed		
Yes	8.1	17.3
No	91.9	10.1
Woman's heavy alcohol use		
≥ 5 drinks/day once weekly	10.5	15.1
< 5 drinks/day once weekly	89.5	10.2
Couple's income ratio		
Woman's earnings \geq partner's	28.0	12.8
Woman's earnings $<$ partner's	72.0	9.8

^aThe effective n is weighted to updated Fresno County adult population data by residence (urban/town/rural), household size, and census block aggregate. Unweighted n = 1155.

^bA total of 691 women were born in Mexico, and 1 was born in Honduras.

^cThere were 38 missing values for income.

TABLE 2—Logistic Regression: Crude and Adjusted Odds Ratios for Mexican American Women Reporting Physical Abuse by Their Current Partner

	Crude OR	95% CI	Adjusted OR	95% CI
Birthplace				
US	2.45**	1.38, 4.35	2.10**	1.24, 3.56
Mexico	1.00	...	1.00	...
Age, y				
18–30	1.41	0.83, 2.38	1.81*	1.10, 3.00
≥31	1.00	...	1.00	...
Residence				
Urban	2.57**	1.41, 4.69	2.13*	1.15, 3.93
Town	1.76	0.92, 3.39	1.79	0.90, 3.54
Rural	1.00	...	1.00	...
Income, monthly				
\$0–\$999	0.98	0.56, 1.73	0.91	0.54, 1.55
≥\$1000	1.00	...	1.00	...
Social support				
No	1.53	0.86, 2.75	1.84*	1.05, 3.20
Yes	1.00	...	1.00	...
No. of children				
≥4	1.57	0.93, 2.64	2.6***	...
0–3	1.00	...	1.00	...
Church attendance				
<1 time/month	2.42**	1.44, 4.07	1.72*	1.05, 2.82
1 or more times/month	1.00	...	1.00	...
Possible mediating variables ^a				
Partner looking for work	1.85	0.80, 4.26	1.52	0.73, 3.20
Woman's heavy alcohol use (ever)	1.56	0.81, 3.03	1.15	0.59, 2.25
Woman's earnings ≥ her partner's	1.35	0.75, 2.45	1.00	0.57, 1.73

Note. OR = odds ratio; CI = confidence interval.

^aAdjusted odds ratios are reported for each of these 3 characteristics, after control for the 7 characteristics in the above model.

* $P \leq .05$; ** $P \leq .01$; *** $P \leq .001$.

tim's history of heavy alcohol use, or victim's having a higher income than her partner.

Discussion

Abuse of women by their intimate partners remains a major social and public health problem that has serious physical, psychological, and social consequences. Accurate population-based prevalence estimates combined with information about the predictors of abuse provide important information for treatment and prevention.³¹

The overall prevalence of IPV reported in this study suggests that partner violence is not a rare event. The prevalence of IPV among US-born Mexican American women in the present study is similar to the reported prevalence among English-speaking Hispanics in the National Family Violence Survey.

Sociodemographic characteristics associated with IPV in this population are consistent with those reported in previous studies of both Anglo and Hispanic populations, which have identified young age,^{1,3,16,32–34} living in an urban area,^{2,17} social isolation,^{2,35} and having many children as common risk factors.^{2,33} Low income is sometimes reported as a risk fac-

tor,^{2,36} but more often no association is found for low income and partner abuse.^{16,17,37} Lack of variability in income in our sample (reflecting low income among Hispanics in general) made this relation difficult to assess. Religious involvement has been shown to be protective in previous studies,^{2,33} as it was in our sample.

Results from the present analysis of women victims of IPV are consistent with findings from 3 population-based studies that examined birthplace (or acculturation) among perpetrators of IPV. In a national sample of 609 Hispanics, US birthplace was a predictor of husbands' violence against their wives (OR = 2.1; $P = .05$).¹⁶ Similarly, Sorenson and Telles described higher rates of self-reported perpetration of IPV among US-born Mexican Americans than among those born in Mexico (31% vs 12.8%; $P < .05$).²⁶ Caetano et al. described the highest rates of IPV perpetration among moderately acculturated Hispanic men and women and the second highest among those who are highly acculturated.¹⁵ These studies primarily examined birthplace/acculturation status as a factor associated with the perpetration of violence. The current work examines the association between birthplace and IPV victimization.

Results in this study show a consistent association between IPV and higher acculturation and are not limited to immigration status. Other measures intended to capture aspects of acculturation include years in the United States (≥ 10 vs < 10 years), country of schooling (all or some schooling in the United States vs all foreign schooling), and a language-based acculturation scale (English dominant, bilingual, and Spanish dominant). Results are consistent with birthplace analyses, with more than 2 times the odds of reporting IPV among women in each of the highest acculturation groups.

Other possible explanatory factors for the birthplace–abuse association include a woman's alcohol use,³⁸ a woman's higher status³⁹ (measured by the ratio of her income to her partner's), and her male partner's unemployment.^{1,16,40} None of these factors were associated with IPV in our data, and the introduction of these variables into our model did not explain the association between IPV and US birthplace.

This study was limited by the fact that questions about IPV were asked only of women, while it was the men who were carrying out the abuse. The strength of this analysis is that it allows us to characterize women who are at risk for abuse. Information on correlates of IPV among women is important in medical and social service settings, where attempts should be made to identify and address IPV. Failure to identify IPV places a woman at continued risk for abuse and may result in treatment failures and increased health care use.^{41–44} An examination of IPV and birthplace in a general population of Mexican American men would make an important contribution toward prevention of violent behavior in this group.

Two factors may have contributed to an underestimation of the true prevalence of IPV. First, recently divorced or separated women without current partners were not asked questions about IPV. This group was shown in earlier studies^{1,26,45,46} to be at highest risk. Second, women receiving welfare may have denied having partners (since this would violate welfare requirements) and thus were not asked about IPV.

While this study did not find an association between welfare and IPV, it is worth noting that welfare eligibility requirements that the father be identified and be involved in child support could place abused Mexican American women and their children at significant risk. This problem is particularly serious for immigrant women, who have been shown to have difficulty gaining access to legal and social services and who may not believe that the protections of the US legal system apply to immigrants.⁴⁷ Since data for this study were collected in 1996, before welfare reform was instituted, an examination of the impact of welfare reform on IPV is not possible, although it remains an important area for future research.

This study contains all the usual biases of self-report. Underreporting is more likely to be a concern than overreporting, given the sanctions against discussing private behavior. Abused women, particularly if their immigrant status is undocumented, may fear the consequences of reporting and thus fail to disclose abuse. Questions were phrased so as to ask about specific behaviors (hitting, choking) rather than about abuse generally. This technique is shown to yield more positive answers than questions that ask about abuse or violence in general.⁴⁸

Despite its limitations, this study contributes to literature on IPV among women of Mexican origin in a population-based sample. The sample was unique in that it included urban, town, and rural residents and did not merge several Hispanic groups. The sample represented a significantly larger number of Mexican Americans (with high response rates) than did previous studies of IPV.^{16-18,26}

In sum, IPV among Mexican-origin women is not a rare event, and US-born women are at highest risk. It seems paradoxical that women who are US born are the target of more violence, given that known risk factors for violence are lower in this group. For example, US-born women report more social supports, fewer children, higher incomes, and higher education. There may be aspects of traditional Mexican culture that serve a protective function for families. With exposure to the United States, traditional culture may erode and families may experience increased stresses, resulting in violence. Conclusions drawn from this analysis have applications in the identification of women at high risk of IPV for the purposes of prevention and treatment.

Mexican Americans are commonly thought to underuse health care services,⁴⁹ so we cannot rely solely on screening and identification of abused women in the health care setting. These findings point to the importance of developing effective bilingual messages about warning signs of impending abuse as well as disseminating information on where to seek assistance for women at risk. Programs may need to be developed and implemented at the community level, including in schools, religious institutions, community centers, and the workplace.³¹ Results from this study may help to target broader public health prevention programs among US-born Mexican American women and their partners. These programs should be aimed at reinforcing family strengths and social networks while addressing the many social conditions, especially in urban areas, that make life among US-born women more stressful.⁵⁰ Further research should be done to increase understanding of the impact of immigration on a woman's risk for IPV. □

Contributors

Both authors contributed substantially to the conception, design, and analysis of the paper. E. A. Lown carried out statistical analyses and drafted earlier versions as well as the final version. W. A. Vega provided comments on drafts, discussed analysis questions, drafted portions of the "Methods" and "Discussion" sections related to the measurement of acculturation, and approved the final draft of the manuscript. He is the principal investigator of the study from which the data for this paper was drawn.

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The research was conducted after appropriate review of the research protocol and interview instrument by the institutional review boards of the University of California, Berkeley and the California State University, Fresno. All interviews were voluntary and were conducted after the survey was fully explained to potential respondents and subjects gave written consent to be interviewed. Respondents had the right to refuse the interview without any penalty or to terminate the interview at any time. No human subject confidentiality issues arose during the course of the research.

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